

**REMARKS**

Applicants' undersigned attorney thanks the Examiner for her comments. Applicants respectfully request reconsideration of this patent application, particularly in view of the above Amendment and the following remarks. Currently, Claims 1-6 and 8-50 are pending in this application.

The present invention is directed to treatment chemicals and systems that are capable of altering the properties of high viscosity materials such as menstrual fluid, blood and fecal matter. Suitable treatment chemistries include ionically cross-linking gelling agents, thickening agents, mucolytic agents, agglutinizing agents, plasma precipitators, lysing agents, and combinations thereof. Such treatment chemistries may be employed in disposable absorbent articles, typically by disposing the treatment chemistry on or within at least a portion of an absorbent material such as a nonwoven web formed from polymeric fibers.

**Amendment to the Claims**

Claims 1, 15, 27 and 32 have been amended to recite an ionically cross-linking gelling agent. Support for this amendment may be found on Page 35, line 18 to Page 36, line 1.

Claim 9 has been amended to clarify that said nonwoven web material comprises a plurality of polymeric fibers and said at least one treatment chemistry is disposed within said plurality of polymeric fibers. Support for this amendment may be found on Page 7, lines 19-21.

Claims 24, 25, 26, 29, 30, 32, 34, 35 and 50 have been amended to provide proper antecedent basis for said ionically cross-linking gelling agents.

Claim 27 has been further amended to clarify that at least one treatment chemistry is disposed at least one of on or within at least a portion of said absorbent layer. Support for this amendment may be found on Page 4, line 21 to Page 5, line 3.

Claim 43 has been amended to clarify that said at least one treatment chemistry comprises a mucolytic agent selected from the group consisting of cysteine, thioglycolates, dithiotriacol, other sulfur-containing thiol materials and combinations and mixtures thereof. Support for this amendment may be found on Page 18, lines 1-8.

Claim 45 has been amended to recite that said at least one treatment chemistry is applied to at least two opposed side wings. Support for this amendment may be found in original Claim 5.

No new matter has been added by way of this amendment. No additional fee is due since the number of independent claims remains unchanged and the number of dependent claims has been reduced.

#### **Claim Rejections - 35 USC §112**

The rejection of Claims 9, 27-31 and 45-50 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention is respectfully traversed.

Applicants have amended Claim 9 to clarify that the nonwoven web material comprises a plurality of polymeric fibers.

Applicants have amended Claim 27 to clarify that at least one treatment chemistry is disposed at least one of on or within at least a portion of said absorbent layer.

Applicants have amended Claim 45 to recite that said at least one treatment chemistry is applied to at least two opposed side wings.

For at least the reasons given above, Applicants respectfully submit that amended Claims 9, 27 and 45 and, therefore, their associated dependent claims are not indefinite. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

#### **Claim Rejections - 35 USC §102**

The rejection of Claims 1-3, 5, 6, 8, 9, 14-16, 18-21, 27, 32, 38-40, 44 and 46-48 under 35 USC §102(b) as being anticipated by U.S. Patent 6,245,693 to Gagliardi et al. is respectfully traversed.

Gagliardi et al. discloses a laminated absorbent structure including an absorbent gelling material and a first odour absorber each held between separate containing layers (Abstract). Such absorbent gelling materials are sometimes referred to as "super-absorbers" (Col. 5, lines 37-40).

In order for a reference to anticipate a claim, the reference must teach each and every element or limitation of the claim. Gagliardi et al. does not teach each

and every element or limitation of amended Claims 1, 15, 27 and 32. Applicants' invention as claimed in amended independent Claims 1, 15, 27 and 32 requires treating at least a portion of an absorbent article such as an absorbent layer or a nonwoven material with at least one treatment chemistry selected from the group consisting of ionically cross-linking gelling agents, thickening agents, mucolytic agents, agglutinizing agents, plasma precipitators, lysing agents, and combinations thereof.

Gagliardi et al does not teach or disclose a treatment chemistry as claimed by Applicants' present invention. Particularly, Gagliardi et al. does not teach or disclose a thickening agent disposed on or within a disposable absorbent article such as on or within an absorbent layer or a nonwoven material, but instead teaches an odour absorber and a superabsorbent material disposed within a laminated absorbent structure.

Applicants' have defined thickening agents as materials that interact with the water in menses and then interact with themselves to gel the menses (Page 31, lines 14-15). It will be appreciated that the use of thickening particles or agents differs from the use of superabsorbents in absorbent articles in that thickening agents not only incorporate fluid into their structures, but also bind to adjacent particles to form a bulk gel. In addition, superabsorbents do not dissolve in solutions and do not rely upon ionic bonding to generate a gel network. (Page 32, lines 13-17.) Moreover, in the case of feminine care products comprising superabsorbents, the red blood cells of the menses attach themselves to the superabsorbents, resulting in blockage of the superabsorbents and a significant reduction in fluid uptake (Page 27, lines 4-7). Such attachment of red blood cells to the superabsorbents would inhibit or prevent the superabsorbent particles from binding to adjacent superabsorbent particles to form a bulk gel. Thus, Gagliardi et al. neither teaches nor discloses a thickening agent.

Moreover, Gagliardi et al. does not teach or disclose treatment chemistries such as ionically cross-linking gelling agents, mucolytic agents, agglutinizing agents, plasma precipitators, lysing agents, and combinations thereof with or without a thickening agent disposed on or within a disposable absorbent article such as on or within an absorbent layer or a nonwoven material.

For at least the reasons presented above, Applicants respectfully submit that amended Claims 1, 15, 27 and 32 are not anticipated by Gagliardi et al. Since Claims 2, 3, 5, 6, 8, 9, 14, and 44 depend from Claim 1, Claims 16 and 18-21 depend from Claim 15, Claims 46-48 depend from Claim 27, and Claims 38-40 depend from Claim 32, Applicants respectfully submit that these claims are also not anticipated by Gagliardi et al. Thus, Applicants respectfully request withdrawal of this rejection.

The rejection of Claims 1-6, 8-12, 15-17, 21-25, 27-37, 41, 43, 44, and 46-48 under 35 USC §102(b) as being anticipated by U.S. Patent 5,782,819 to Tanzer et al. is respectfully traversed.

Tanzer et al. discloses an article having at least one fit panel connected to at least one waistband section of the article to provide a more reliable and more consistent fit about a wearer with greater resistance to sagging and drooping (Col. 1, lines 33-52). The article includes an absorbent body structure that may include high absorbency absorbent gelling materials such as superabsorbents made from synthetic, natural or modified natural polymers and materials such as chitosan (Col. 8, lines 8-11 and 28-34).

In order for a reference to anticipate a claim, the reference must teach or disclose each and every element or limitation of the claim. Tanzer et al. does not disclose each and every element of amended Claims 1, 15, 27 and 32. Applicants' invention as claimed in amended independent Claims 1, 15, 27 and 32 requires treating at least a portion of an absorbent article such as an absorbent layer or a nonwoven material with at least one treatment chemistry selected from the group consisting of ionically cross-linking gelling agents, thickening agents, mucolytic agents, agglutinizing agents, plasma precipitators, lysing agents, and combinations thereof.

Tanzer et al does not disclose a treatment chemistry as claimed by Applicants' present invention. Particularly, Tanzer et al. does not teach or disclose an ionically cross-linking gelling agent disposed on or within a disposable absorbent article such as on or within an absorbent layer or a nonwoven material.

Applicants' have defined an ionically cross-linking gelling agent as a material that gels a fluid by producing a matrix of protein and cationic polymer that is

hydrated (Page 35, lines 16-17). Suitable ionically cross-linking gelling agents for use in personal care article of this invention include cationic polymers having a polyglycan backbone (Page 36, lines 9-13).

Tanzer et al. does not disclose ionically cross-linking gelling agents, but instead discloses that chitosan may be used in an absorbent body as a high-absorbency absorbent gelling agent.

Regarding Claim 43, Applicants have amended Claim 43 to recite that the treatment chemistry comprises a mucolytic agent. Tanzer et al. does not disclose an absorbent article including a mucolytic agent.

Furthermore, Tanzer et al. does not teach or disclose treatment chemistries such as thickening agents, agglutinizing agents, plasma precipitators, lysing agents, and combinations thereof with or without an ionically cross-linking gelling agent or a mucolytic agent disposed on or within a disposable absorbent article such as on or within an absorbent layer or a nonwoven material.

For at least the reasons presented above, Applicants respectfully submit that amended Claims 1, 15, 27 32 and 43 are not anticipated by Tanzer et al. Since Claims 2-5, 8-12 and 44 depend from Claim 1, Claims 16, 17 and 21-25 depend from Claim 15, Claims 28-31 and 46-48 depend from Claim 27, and Claims 33-37, and 41 depend from Claim 32, these claims are also not anticipated by Tanzer et al. Thus, Applicants respectfully request withdrawal of this rejection.

#### **Claim Rejections - 35 USC §103**

The rejection of Claims 13 and 42 under 35 USC §103(a) as being unpatentable over U.S. Patent 5,782,819 to Tanzer et al. in view of U.S. Patent 6,159,591 to Beihoffer et al. is respectfully traversed.

Claims 13 and 42 depend from and further limit Claims 1 and 32, respectively, which Applicants believe are patentable. As set forth above, Tanzer et al. does not disclose a treatment chemistry selected from the group consisting of ionically cross-linking gelling agents, thickening agents, mucolytic agents, agglutinizing agents, plasma precipitators, lysing agents and combinations thereof.

Beihoffer fails to overcome the gaps of Tanzer et al. in that it is directed to multicomponent superabsorbent gel particles including at least one microdomain of an acidic water-absorbing resin in contact with, or in close proximity

to, at least one microdomain of a basic water-absorbing resin that overcomes the salt poisoning effect that has been noted in connection with exposure to electrolyte-containing liquids. Beihoffer does not disclose or suggest bicomponent polymeric fibers having at least one treatment chemistry selected from the group consisting of ionically cross-linking gelling agents, thickening agents, mucolytic agents, agglutinizing agents, plasma precipitators, lysing agents, and combinations thereof disposed within at least one segment of the bicomponent fiber that may be used to form a nonwoven material capable of modifying the properties of high viscosity materials such as blood, menses or feces.

Furthermore, Beihoffer et al. provides no motivation for one of ordinary skill in the art to make a bicomponent polymeric fiber including at least one treatment chemistry disposed therein that may be used to form a nonwoven material since Beihoffer et al. is directed to providing a superabsorbent material that exhibits exceptional water absorption and retention properties, especially with respect to electrolyte-containing liquids, that overcomes the salt poisoning effect, and not to a material capable of modifying the properties of high viscosity materials.

For at least the reasons given above, Applicants respectfully submit that the teachings of Tanzer et al. in view of Beihoffer et al. fail to disclose or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

#### **Allowable Subject Matter**

The Examiner has indicated Claims 26, 45, 49 and 50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants have amended independent Claims 1, 15, 27 and 32 as discussed above. Thus, Applicants believe these claims are in condition for allowance and, therefore, respectfully request withdrawal of this objection.

**Conclusion**

Applicants believe that this case is now in condition for allowance. If the Examiner feels that any issues remain, then Applicants' undersigned attorney would like to discuss the case with the Examiner. The undersigned can be reached at (847) 490-1400.

Respectfully submitted,



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